

DETAILED ACTION

The following office action replaces the previous action mailed on September 26, 2008. The previous action failed to examine the previously amended claims submitted by the applicant, therefore the time to respond has appropriately been restarted.

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 1-16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The claims are generally narrative and indefinite, failing to conform with current U.S. practice. They appear to be a literal translation into English from a foreign document and are replete with grammatical and idiomatic errors.

Regarding claim 1, the phrase "hinge- like" renders the claim(s) indefinite because the claim(s) include(s) elements not actually disclosed (those encompassed by "or the like"), thereby rendering the scope of the claim(s) unascertainable. See MPEP § 2173.05(d).

Regarding claims 3, 7, 8, 9, 11 and 13, the phrase "preferably" renders the claim indefinite because it is unclear whether the limitation(s) following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

The term "good" in claim 1 is a relative term which renders the claim indefinite. The term "good" is not defined by the claim, the specification does not provide a

standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Similarly "as close as possible" in claim 9 is unclear —how close is possible? Similarly, claim 10 – what is 'slightly smaller" – how you would determine how much smaller? Claim 13—what defines "high" strength and 'tough'? Claim 14 – what defines "wear-resistant" and what defines "little" running noise? .

Regarding claim 9, the phrase "in particular" renders the claim indefinite because it is unclear whether the limitations following the phrase are part of the claimed invention. See MPEP § 2173.05(d).

Numerous grammatical mistakes make the claims unclear – claim 10 and 12 have the specific unclear sections bolded by examiner. Applicant must review all claims – these are non-limiting examples only.

*(currently amended) Device according to Claim 1, characterized in that the diameter of the running wheels (22) of equal size is **slightly smaller** the spacing between the parallel axes of the running wheels (22).*

12.(currently amended) Device according to Claim 1, characterized in that the sliding bearings (33) are formed from a thermoplastic material with a graphite

Dependent claims 2-16 are rejected as depending directly or indirectly from rejected claims.

Claim Clarifications

1. Regarding 35 USC 112 paragraph 6. Examiner notes from Chapter 2100 of the current MPEP, section 2181:

A claim limitation will be interpreted to invoke 35 U.S.C. 112, sixth paragraph if it meets the following 3-prong analysis:

- (A) *the claim limitations must use the phrase "means for " or "step for ";*
- (B) *the "means for " or "step for " must be modified by functional language; and*
- (C) *the phrase "means for " or "step for " must not be modified by sufficient structure, material or acts for achieving the specified function.*

With respect to the first prong of this analysis, a claim element that does not include the phrase "means for" or "step for" will not be considered to invoke 35 U.S.C. 112, sixth paragraph. If an applicant wishes to have the claim limitation treated under 35

U.S.C. 112, sixth paragraph, applicant must either: (A) amend the claim to include the phrase "means for" or "step for" in accordance with these guidelines; or (B) show that even though the phrase "means for" or "step for" is not used, the claim limitation is written as a function to be performed and does not recite sufficient structure, material, or acts which would preclude application of 35 U.S.C. 112 , sixth paragraph.

Since examiner cannot find clearly defined equivalents or definitions of " guiding means" or "connecting means" in the specification, examiner is considering the claims to include any structure capable of performing the function.

Appropriate correction is required.

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. As best understood, Claims 1, 5, 8-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Foltz 3,708,827.

1. In re claim 1 with reference to Figures 1-3, Foltz '827 discloses a device for the closure of opening in structures comprising:

- Vertical closure elements (18) in strip form connected to one another in a hinge-like manner in such a way that they can be turned about a vertical longitudinal central axis.
- Running carriages (10) made to move on a horizontal rail (23) and from which some of the closure elements (18) are suspended, having a bearing body (12), four running wheels (22) made of plastic mounted on two parallel axes and a sliding bearing (22b) made of plastic. (column 1, lines 62-67 and column 2, lines 1-5)

2. Foltz '827 fails to disclose:

- The bearing body is made of plastic.

However, Foltz '827 discloses it is known to make parts out of plastic materials therefore, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the bearing body out of plastic, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. Doing so would provide a lightweight, cost effective alternative to heavy metal pieces.

3. In re claims 5 and 8-10, Foltz discloses:

- The underside of the running rail (23) has a continuous longitudinal slot (opening on the bottom), narrow bottom edge strips (26) formed on both sides of the slot, and the bearing body (12) being guided in the slot.
 - The bottom edge strip (26) of the running rail (23) is provided with at least one guiding means (unnumbered v-shaped indentation) for the running wheels (22), the guiding means being formed as a longitudinal groove.
 - The running wheels (22) lie as close as possible behind one another in such a way that the longitudinal central planes of the wheels (22) lie in a common vertical plane which runs through the longitudinal groove in each surface of the bottom edge strip (26)
 - The diameter of the running wheels (22) is slightly smaller than the spacing between the parallel axes of the running wheels.
4. In re claims 13,14 and 15, Foltz discloses:
- The running wheels are formed from a thermoplastic material which is plastic is wear resistant and causes little running noise and is polyamide. (nylon, Column 2, lines 1-2)
5. Foltz '827 fails to disclose:
- The bearing bodies are formed from high strength thermoplastic material such as polyamide and the running wheels are formed of polypropylene.
- However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to make the bearing bodies out of polyamide and the wheels out of polypropylene since it has been held to be within the

general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. By making them out of these materials, it would provide sufficient strength in a cheap, lightweight material.

6. In re claim 11, the closure of Foltz '827 has been discussed above but fails to disclose:

- The diameter of the running wheels or the spacing between the parallel axes on which the running wheels are arranged is smaller than the spacing between the vertical central planes of the wheels on opposite ends of the axis, the axial spacing between the wheels being .7 to .9 times the diameter of the running wheels.

However, it would have been an obvious matter of design choice to make the diameter of the running wheels or spacing between the parallel axes be smaller than the spacing between the vertical planes, since such a modification would have involved a mere change in the size of a component. A change in size is generally recognized as being within the level of ordinary skill in the art. *In re Rose*, 105 USPQ 237 (CCPA 1955). Further, changes in size or shape without special functional significance are not patentable. *Research Corp.v. Nasco Industries, Inc.*, 501 F2d 358; 182 USPQ 449 (CA 7) cert. Denied 184 USPQ 193; 43 USLW 3359 (1974). One having ordinary skill in the art could choose to make the size of the running wheels and the spacing between to fit whatever constraints where needed in order to solve a particular problem such as space constraints or overall cost.

In re claim 12, the examiner takes Official Notice that it is old and well known in the art to use graphite for its low friction properties to help aid in the use of bearings therefore one having ordinary skill in the art at the time the invention was made would have known to use graphite in the bearings in order to reduce friction. Graphite avoids the leakage problems of grease or oil lubrications, and is well-known and accepted as a bearing lubricant.

7. Claims 2-4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Foltz 3,708,827 in view of Whitley 6,553,618.

8. In re claim 2, the closure of Foltz has been discussed above and discloses:

- Two running wheels (22) on an axis connected by a fixed bolt (20) mounted in the bearing body (12) and two sliding bearings (22b).

9. Foltz '827 fails to disclose:

- The running wheel fixed to a rotatable bolt mounted in sliding bearings.

10. With reference to Figure 2, Whitley '618 discloses:

- The running wheel (32) fixed to a rotatable bolt (52) mounted in a sliding bearing (54).

11. It would have been obvious to one having ordinary skill in the art at the time the invention was made to that the wheel could be fixed to the bolt and the bolt allowed to rotate in a bearing as taught by Whitley '618 since it has been held that a mere reversal of the essential working parts of a device involves only routine skill in the art. *In re Einstein*, 8 USPQ 167. It has been clearly shown that it is old and

well known to use bearings to support shafts and wheels, and to rearrange the location of the parts does not constitute an inventive step.

12. In re claims 3 and 4, Foltz/Whitley discloses:

- The bearings (22b) are assigned to opposite lateral edge regions of the bearing body (12). (Foltz)
- The outer end face of the bearing (54) forms a stop face (flared end) for the wheel. (Whitley)
- The bearing (54) is formed completely in responding receptacles (58a)(59a) and is non-rotatable and non-displaceable.

13. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Foltz 3,708,827 in view of Owens 5,499,671.

14. In re claim 6, the closure of Foltz '827 has been discussed above but fails to disclose:

- The lower region of the bearing body extends through the longitudinal slot and is assigned at least one guide roller which can rotate about a vertical axis and can be brought into contact with a guiding surface edge of the running rail.

15. With reference to Figures 1 and 2, Owens '671 discloses:

- The lower region (26) of the bearing body extends through the longitudinal slot (22) and is assigned at least one guide roller (32) which can rotate about a vertical axis and can be brought into contact with a guiding surface edge of the running rail (20).

16. It would have been obvious to one having ordinary skill in the art at the time the invention was made to include the guide roller as taught by Owens '671 in order to provide a low friction contact with the edges of the track. (column 4, lines 55-60)

17. In re claim 7, Foltz/Owens discloses:

- The roller (32) is mounted in a freely rotatable manner.
- A connecting means (14) vertically directed at a central orientation through the bearing body (12), a closure element (18) to which a running carriage is assigned being fastened by the connecting means. (Foltz)

Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Toti 2004/0123959, Robinson et al 5,957,185, Magaldi et al 5,458,179, and Sassano 3,670,797 .

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JEREMY C. RAMSEY whose telephone number is (571)270-3133. The examiner can normally be reached on Monday-Friday 6:30 am-4:00 pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Katherine Mitchell can be reached on 571-272-7069. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3634

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KATHERINE W MITCHELL/
Supervisory Patent Examiner, Art
Unit 3634

/Jeremy C Ramsey/
Examiner, Art Unit 3634